

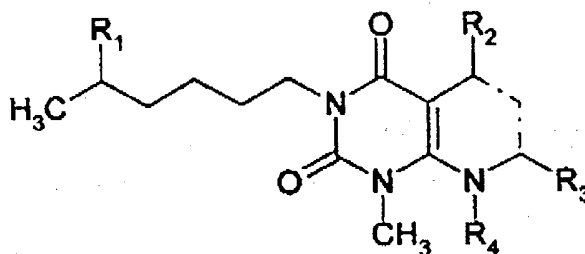
Application No. 09/859,503

Docket No.: 4377.0062

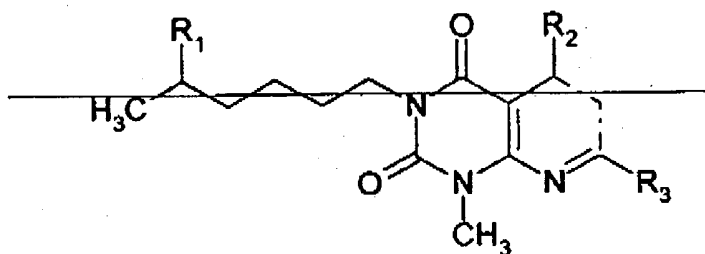
AMENDMENTS TO THE CLAIMS:

Upon entry, the following listing of claims will replace all prior versions and listings in the above-captioned patent application:

1. (Currently Amended) A therapeutic compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having ~~one of~~ the following ~~formulae~~formula:



or



wherein:

R₁ is selected from a member of the group consisting of hydrogen, hydroxyl, methoxyl, acylamino group, cyano group, sulfo, sulfinyl, sulfhydryl (mercapto), sulfeno, sulfanyl, sulfamyl, sulfamino, and phosphino, phosphinyl, phospho, phosphono and -NR_aR_b, wherein each of R_a and R_b may be the same or different and each is selected from the group consisting of

Application No. 09/859,503

Docket No.: 4377.0062

hydrogen and optionally substituted: $C_{(1-20)}$ alkyl, $C_{(3-12)}$ cycloalkyl, $C_{(2-20)}$ alkenyl,

$C_{(3-12)}$ cycloalkenyl, $C_{(2-20)}$ alkynyl, aryl, heteroaryl, and heterocyclic group;

R_2 and R_3 are independently selected from a member of the group consisting of halo, oxo,

$C_{(1-20)}$ alkyl, $C_{(1-20)}$ hydroxyalkyl, ~~$C_{(1-20)}$ thioalkyl~~, $C_{(1-20)}$ alkylthio, $C_{(1-20)}$ alkylaminoalkyl,

$C_{(1-20)}$ aminoalkyl, $C_{(1-20)}$ aminoalkoxyalkenyl, $C_{(1-20)}$ aminoalkoxyalkynyl, $C_{(1-20)}$ diaminoalkyl,

$C_{(1-20)}$ triaminoalkyl, $C_{(2-20)}$ tetraaminoalkyl, $C_{(1-20)}$ alkylamido, $C_{(1-20)}$ alkylamidoalkyl,

$C_{(1-20)}$ amidoalkyl, $C_{(1-20)}$ acetamidoalkyl, $C_{(2-20)}$ alkenyl, $C_{(2-20)}$ alkynyl, $C_{(1-20)}$ alkoxyl,

$C_{(1-20)}$ alkoxyalkyl, $C_{(1-20)}$ dialkoxyalkyl, and $-NR_aR_b$; and

R_4 may be hydrogen or an optionally substituted member of the group consisting of

$C_{(1-20)}$ alkyl, $C_{(3-12)}$ cycloalkyl, $C_{(2-20)}$ alkenyl, $C_{(3-12)}$ cycloalkenyl, $C_{(2-20)}$ alkynyl, aryl, heteroaryl,

and heterocyclic group.

2. (Currently Amended) The therapeutic compound of claim 1, wherein R_2 and R_3 are independently selected from a member of the group consisting of hydrogen, halo, thio, oxo,

$C_{(1-10)}$ alkyl, $C_{(1-10)}$ hydroxyalkyl, ~~$C_{(1-10)}$ thioalkyl~~, $C_{(1-10)}$ alkylthio, $C_{(1-10)}$ alkylamino,

$C_{(1-10)}$ alkylaminoalkyl, $C_{(1-10)}$ aminoalkyl, $C_{(1-10)}$ aminoalkoxyalkenyl,

$C_{(1-10)}$ aminoalkoxyalkynyl, $C_{(1-10)}$ diaminoalkyl, $C_{(1-10)}$ triaminoalkyl, $C_{(2-10)}$ tetraaminoalkyl,

$C_{(1-10)}$ aminotrialkoxyamino, $C_{(1-10)}$ alkylamido, $C_{(1-10)}$ alkylamidoalkyl, $C_{(1-10)}$ amidoalkyl,

$C_{(1-10)}$ acetamidoalkyl, $C_{(2-10)}$ alkenyl, $C_{(2-10)}$ alkynyl, $C_{(1-10)}$ alkoxyl, $C_{(1-10)}$ alkoxyalkyl, and

$C_{(1-10)}$ dialkoxyalkyl.

3. (CANCELED)

4. (Currently Amended) The therapeutic compound of claim 37, wherein each of R_2 and R_3 is substituted with one or more members of the group consisting of hydroxyl, methyl,

Application No. 09/859,503

Docket No.: 4377.0062

carboxyl, furyl, furfuryl, biotinyl, phenyl, naphthyl, amino group, amido group, carbamoyl group, cyano group, sulfo, sulfonyl, sulfinyl, sulfhydryl, sulfeno, sulfanilyl, sulfamyl, sulfamino, phosphino, phosphinyl, phospho, phosphono, N-OH, -Si(CH₃)₃, C₍₁₋₃₎alkyl, C₍₁₋₃₎hydroxyalkyl, ~~C₍₁₋₃₎thioalkyl~~, C₍₁₋₃₎alkylamino, benzyldihydrocinnamoyl group, benzoyldihydrocinnamido group, optionally substituted heterocyclic group and optionally substituted carbocyclic group.

5. (Original) The therapeutic compound of claim 4, wherein the heterocyclic group or carbocyclic group is substituted with one or more members of the group consisting of halo, hydroxyl, nitro, SO₂NH₂, C₍₁₋₆₎alkyl, C₍₁₋₆₎haloalkyl, C₍₁₋₆₎alkoxyl, C₍₁₋₁₁₎alkoxyalkyl, C₍₁₋₆₎alkylamino, and C₍₁₋₆₎aminoalkyl.

6. (Original) The therapeutic compound of claim 4, wherein the heterocyclic group is a member selected from the group consisting of acridinyl, aziridinyl, azocinyl, azepinyl, benzimidazolyl, benzodioxolanyl, benzofuranyl, benzothiophenyl, carbazole, 4a H-carbazole, chromanyl, chromenyl, cinnolinyl, decahydroquinolinyl, dioxoindolyl, furazanyl, furyl, furfuryl, imidazolidinyl, imidazolyl, imidazolyl, 1H-indazolyl, indolenyl, indolyl, indoliziny, indolyl, 3H-indolyl, isobenzofuranyl, isochromanyl, isoindolinyl, isoindolyl, isoquinolinyl, isothiazolyl, isoxazolyl, morpholinyl, naphthyridinyl, octahydro-isoquinolinyl, oxazolidinyl, oxazolyl, oxiranyl, perimidinyl, phenanthridinyl, phenanthrolinyl, phenarsazinyl, phenazinyl, phenothiazinyl, phenoxathiinyl, phenoxazinyl, phthalazinyl, piperazinyl, piperidinyl, 4-pipendonyl, piperidyl, pteridinyl, purinyl, pyranyl, pyrazinyl, pyrazolidinyl, pyrazolinyl, pyrazolyl, pyridazinyl, pyndinyl, pyridyl, pyndyl, pyrimidinyl, pyrrolidinyl, 2-pyrrolidonyl, pyrrolonyl, pyrrolyl, 2H-pyrrolyl, quinazolinyl, 4H-quinoliziny, quinolinyl, quinoxaliny, quinuclidinyl, β-carbolinyl, tetrahydrofuranyl, tetrahydroisoquinolinyl, tetrahydroquinolinyl,

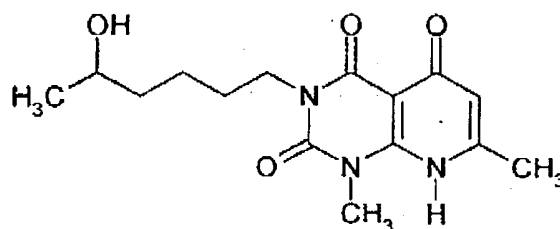
Application No. 09/859,503

Docket No.: 4377.0062

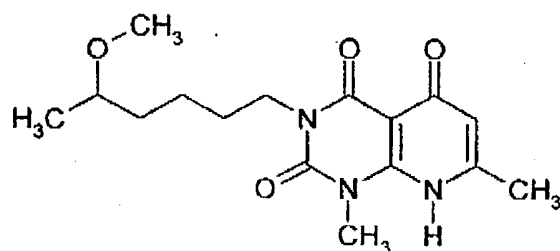
tetrazolyl, 6H-1,2,5-thiadiazinyl, 2H-6H-1,5,2-dithiazinyl, thianthrenyl, thiazolyl, thienyl, thiophenyl, triazinyl, xanthenyl and xanthinyl.

7. (Previously presented) The therapeutic compound of claim 4, wherein the carbocyclic group is a member selected from the group consisting of adamantyl, anthracenyl, benzyl, bicyclo[2.2.1]heptanyl, bicyclo[2.2.1]hexanyl, bicyclo[2.2.2]octanyl, bicyclo[3.2.0]heptanyl, bicyclo[4.3.0]nonanyl, bicyclo[4.4.0]decanyl, biphenyl, biscyclooctyl, cyclobutyl, cyclobutenyl, cycloheptyl, cycloheptenyl, cyclohexanedionyl, cyclohexenyl, cyclohexyl, cyclooctanyl, cyclopentadienyl, cyclopentanedionyl, cyclopentenyl, cyclopentyl, cyclopropyl, decalanyl, 1,2-diphenylethanyl, indanyl, 1-indanonyl, indenyl, naphthyl, naphthalenyl, phenyl, resorcinolyl, stilbenyl, tetrahydronaphthyl, tetralinyl, tetralonyl, and tricyclododecanyl.

8. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



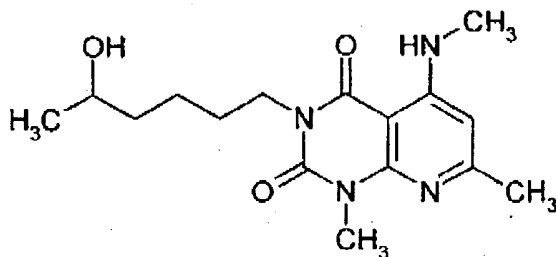
9. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



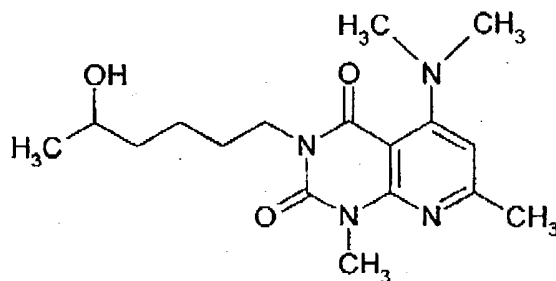
Application No. 09/859,503

Docket No.: 4377.0062

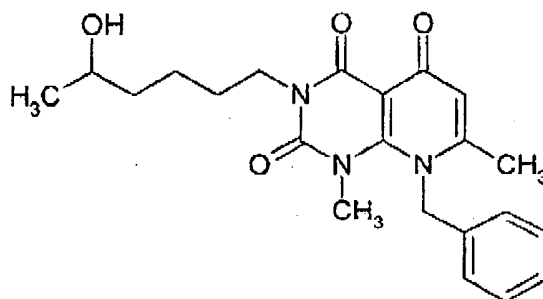
10. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



11. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



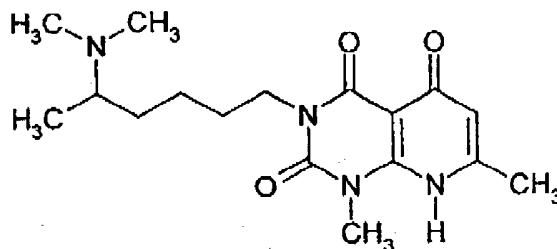
12. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



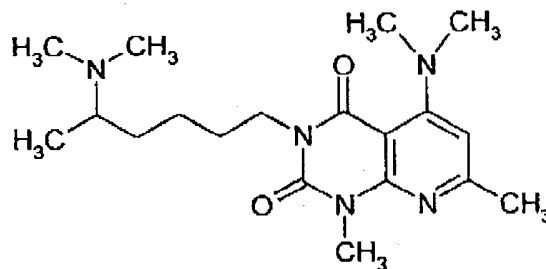
Application No. 09/859,503

Docket No.: 4377.0062

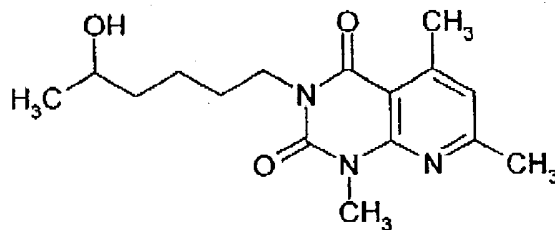
13. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



14. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



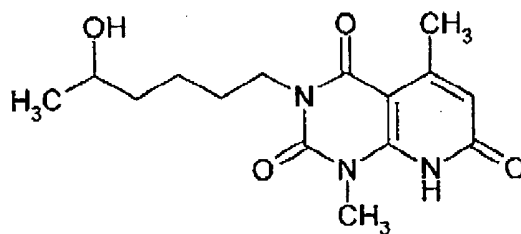
15. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



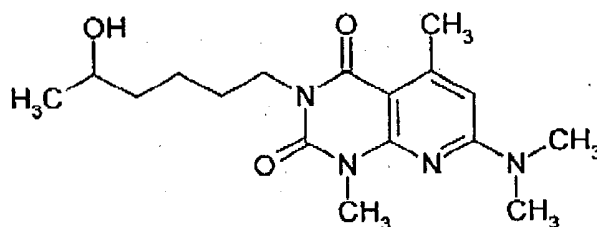
16. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:

Application No. 09/859,503

Docket No.: 4377.0062



17. (Currently Amended) A compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having the formula:



18. (Original) A pharmaceutical composition comprising the compound of claim 1 in admixture with a pharmaceutically acceptable carrier, adjuvant or vehicle.

Claims 19 to 27. (CANCELED)

28. (Currently Amended) A method for treating a T1 cell-mediated inflammatory response in a mammal in need of such treatment, the method comprising administering to the mammal a therapeutically effective amount of the compound of claim 1, ~~wherein said compound is capable of inhibiting an IL-12 mediated cellular process or activity, thereby inhibiting the inflammatory response.~~

29. (Original) The method of claim 28, wherein the inflammatory response is associated with a disease or condition selected from the group consisting of chronic inflammatory disease, chronic intestinal inflammation, arthritis, psoriasis, asthma and autoimmune disorders.

Application No. 09/859,503

Docket No.: 4377.0062

30. (Original) The method of claim 28, wherein said autoimmune disorder is selected from Type-1 IDDM, multiple sclerosis, rheumatoid arthritis, uveitis, inflammatory bowel disease, lupus disorders, and acute and chronic graft-versus-host disease.

31. (Original) The method of claim 28, wherein said mammal is a human.

32. (Currently Amended) A method for treating a T2 cell-mediated anti-inflammatory response in a mammal in need of such treatment, the method comprising administering to the mammal a therapeutically effective amount of the compound of claim 1, ~~wherein said compound is capable of inhibiting an IL-4 mediated cellular process or activity, thereby inhibiting anti-inflammatory response.~~

33. (Original) The method of claim 32, wherein the anti-inflammatory response is associated with a disease or condition selected from the group consisting of asthma, atopic dermatitis, hay fever, eczema, urticaria and food allergy.

34. (Original) The method of claim 33, wherein said disease is asthma.

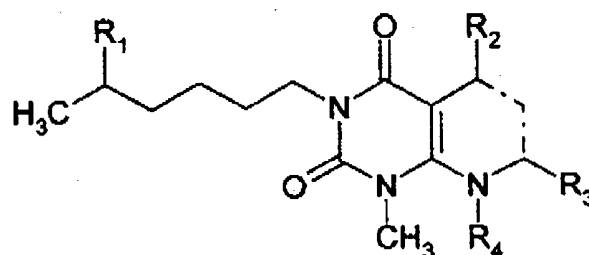
35. (Original) The method of claim 32, wherein said mammal is a human.

36. (Currently Amended) A method for treating NIDDM comprising a step of administering to a subject in need of such treatment a therapeutically effective amount of a the compound of claim 1.

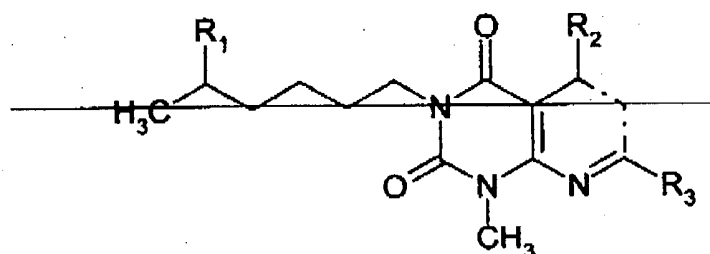
37. (Currently Amended) A therapeutic compound, including resolved enantiomers, diastereomers, tautomers, and salts ~~and solvates~~ thereof, having ~~one of~~ the following formulae
formula:

Application No. 09/859,503

Docket No.: 4377.0062



or



wherein:

R_1 is selected from a member of the group consisting of hydrogen, hydroxyl, methoxyl, acylamino group, cyano group, sulfo, sulfonyl, sulfinyl, sulfhydryl (mercapto), sulfeno, sulfanilyl, sulfamyl, sulfamino, phosphino, phosphinyl, phospho, phosphono and $-NR_aR_b$, wherein each of R_a and R_b may be the same or different and each is selected from the group consisting of hydrogen and optionally substituted: $C_{(1-20)}$ alkyl, $C_{(3-12)}$ cycloalkyl, $C_{(2-20)}$ alkenyl, $C_{(3-12)}$ cycloalkenyl, $C_{(2-20)}$ alkynyl, aryl, heteroaryl, and heterocyclic group;

R_2 and R_3 are independently selected from a unsubstituted or substituted member of the group consisting of methyl, ethyl, oxo, isopropyl, n-propyl, isobutyl, n-butyl, t-butyl, 2-hydroxyethyl, 3-hydroxypropyl, 3-hydroxy-n-butyl, 2-methoxyethyl, 4-methoxy-n-butyl, 5-hydroxyhexyl, 2-bromopropyl, 3-dimethylaminobutyl, 4-chloropentyl, methylamino, amino-methyl, and methylphenyl; and

Application No. 09/859,503

Docket No.: 4377.0062

R_4 may be hydrogen or an optionally substituted member of the group consisting of $C_{(1-20)}$ alkyl, $C_{(3-12)}$ cycloalkyl, $C_{(2-20)}$ alkenyl, $C_{(3-12)}$ cycloalkenyl, $C_{(2-20)}$ alkynyl, aryl, heteroaryl, and heterocyclic group.